

## CLAIMS

1. Electric toy vehicle comprising: an electric motor (11), a speed reducer (13), a power supply battery (12) for powering said electric motor (11) and moving the vehicle, and at least two wheels (14, 15), at least one (14) of which is a driving wheel, characterized in that at least one of the wheels (14) has a coefficient of friction greater than about 0.35.  
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2. Toy vehicle according to Claim 1, characterized in that at least one of the wheels (14, 15) has a coefficient of friction greater than about 0.5.  
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3. Toy vehicle according to Claim 1, characterized in that at least one of the wheels (14, 15) has a coefficient of friction preferably ranging between about 0.5 and about 3.0.
4. Toy vehicle according to any one of the preceding claims,  
15 characterized in that said at least one wheel (14, 15) having a coefficient of friction greater than about 0.35 is a driving wheel.
5. Toy vehicle according to any one of the preceding claims,  
characterized in that said at least one wheel (14, 15) having a coefficient of friction greater than about 0.35 comprises a rim (142, 152)  
20 and a tyre (141, 151), where said tyre is a tyre comprising a rubber carcass.
6. Toy vehicle according to Claim 5, characterized in that said rubber carcass comprises at least two cross plies.
7. Toy vehicle according to Claim 6, characterized in that said cross plies comprise cords made of nylon.  
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8. Toy vehicle according to any of Claims 5, 6 or 7, characterized in that said tyre (141, 151) comprises a tread with blocks and grooves forming a tread pattern.
9. Toy vehicle according to any of Claims 5, 6, 7 or 8, characterized in that the thickness of the carcass in the sidewall zone ranges between  
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about 1.0 mm and 4.5 mm, more preferably between about 2.0 mm and 3.8 mm, and even more preferably between about 2.5 mm and about 3.3 mm.

5 10. Toy vehicle according to any one of Claims 5 to 9, characterized in that said tyre has a size in the range consisting of 10.00 X 5.00 – 5"1/2; 13 X 6.00 – 7" and 15 X 7.00 – 8"1/2.

10 11. Toy vehicle according to any one of the preceding claims, characterized in that it also comprises an electronic control system (17) which is designed to regulate the power supply voltage to the motor (11), typically by means of a potentiometer.

15 12. Toy vehicle according to Claim 11, characterized in that said electronic control system (17) also comprises means for regulating the acceleration in a predetermined manner substantially independently of the load transported by the vehicle, in accordance with a suitable acceleration ramp.

20 13. Toy vehicle according to any one of Claims 11 to 12, characterized in that said electronic control system (17) also comprises means for regulating the deceleration in a predetermined manner substantially independently of the load transported by the vehicle, in accordance with a suitable deceleration ramp.

14. Toy vehicle according to any one of Claims 11 to 13, characterized in that said electronic control system (17) also comprises short-circuiting means for managing the motor braking function.

25 15. Toy vehicle according to any one of Claims 11 to 14, characterized in that said electronic control system (17) also comprises means for controlling the direct-current flow and preventing current peaks affecting the motor, typically when starting and reversing.

30 16. Toy vehicle according to any one of Claims 11 to 15, characterized in that said electronic control system (17) also comprises means able to disable the functions of the vehicle at predefined

overload values.

17. Toy vehicle according to any one of Claims 11 to 16, characterized in that said electronic control system (17) also comprises means for limiting complete discharging of the power supply battery (12).  
5 18. Toy vehicle according to any one of Claims 11 to 17, characterized in that said electronic control system (17) also comprises means for electronically disabling the functions of the vehicle during recharging of the power supply battery (12).  
19. Toy vehicle according to any one of Claims 11 to 18, characterized in that said electronic control system (17) also comprises means for indicating the state of charging of the battery.  
20. Electronic control system (17) for an electric toy vehicle, the  
10 vehicle comprising: an electric motor (11), a speed reducer (13), a power supply battery (12) for powering said electric motor (11) and moving the vehicle, and at least two wheels (14, 15), at least one (14) of which is the driving wheel, characterized in that it is designed to regulate the power supply voltage to the motor (11).  
15 21. Electronic control system (17) according to Claim 20, characterized in that it also comprises means for regulating the acceleration in a predetermined manner substantially independently of the load transported by the vehicle, in accordance with a suitable acceleration ramp.  
20 22. Electronic control system (17) according to either one of Claim 20 or 21, characterized in that it also comprises means for regulating the deceleration in a predetermined manner substantially independently of the load transported by the vehicle, in accordance with a suitable deceleration ramp.  
25 23. Electronic control system (17) according to any one of Claims 20 to 22, characterized in that it also comprises short-circuiting means for managing the motor braking function.

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24. Electronic control system (17) according to any one of Claims 20 to 23, characterized in that it also comprises means for controlling the direct-current flow and preventing current peaks affecting the motor, typically when starting and reversing.
- 5 25. Electronic control system (17) according to any one of Claims 20 to 24, characterized in that it also comprises means able to disable the functions of the vehicle at predefined overload values.
- 10 26. Electronic control system (17) according to any one of Claims 20 to 25, characterized in that it also comprises means for limiting complete discharging of the power supply battery (12).
27. Electronic control system (17) according to any one of Claims 20 to 26, characterized in that it also comprises means for electronically disabling the functions of the vehicle during recharging of the power supply battery (12).
28. Electronic control system (17) according to any one of Claims 20 to 27, characterized in that it also comprises means for indicating the state of charging of the battery.
29. Tyre (141, 151) for a wheel (14, 15) of an electric toy vehicle, characterized in that it comprises a rubber carcass and at least one pair of cross plies, said tyre having a coefficient of friction greater than about 0.35, preferably greater than about 0.5 and even more preferably ranging between about 0.5 and about 3.0.

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